

**CLAIMS**

1. A microelectronic package comprising  
a tubular housing comprising an inner wall defining a compartment;  
a support received in the compartment; and  
a microelectronic assembly affixed to the support and including  
a substrate comprising a major surface, said microelectronic assembly being  
arranged on said support with said major surface facing the inner wall and  
spaced apart therefrom by a gas passage.
2. A microelectronic package according to claim 1 wherein the  
support comprises a spacer that engages the inner wall.
3. A microelectronic package according to claim 1 wherein the  
support is a cylinder or a polygonal prism and defines a interior chamber  
suitable for receiving a component.
4. A microelectronic package according to claim 1 wherein the  
tubular housing comprises a longitudinal axis, and wherein the support  
comprises a plurality of co-axial ribs to which the substrate is affixed.
5. A microelectronic package according to claim 1 wherein the  
support comprises a support surface spaced apart from the inner wall, and  
wherein the substrate is attached to the support surface.

6. A microelectronic package comprising:
  - a tubular housing comprising a cylindrical inner wall defining a compartment and symmetrical about an axis;
  - a support received in said compartment and comprising a plurality of axial ribs; and
  - a microelectronic assembly comprising at least one substrate having a major surface, said microelectronic assembly being affixed to said ribs such that the major surface is parallel to the axis and faces the cylindrical inner wall spaced apart therefrom.
7. A microelectronic package according to claim 6 wherein the microelectronic assembly comprises electronic components attached to the major surface.
8. A microelectronic package according to claim 6 wherein the microelectronic assembly comprises a plurality of substrates and electronic components attached to the substrates, each substrate having axial edges affixed to the ribs, said microelectronic assembly further comprising flexible interconnects extending about said ribs and connecting electronic components on adjacent substrates.
9. A microelectronic package according to claim 6 wherein the support comprises end frames attached to the axial ribs and comprising spacers that extend radially outward from said end frames and engage the

cylindrical inner wall to provide spacing between the microelectronic assembly and the cylinder inner wall.

10. A microelectronic package according to claim 6 wherein the support and the microelectronic assembly surround a central chamber suitable for receiving other components.

11. A microelectronic package according to claim 6 wherein the microelectronic assembly is spaced apart from the cylindrical wall to define a peripheral gas passage therebetween for conveying coolant gas.

12. A microelectronic package comprising:

a tubular housing comprising a cylindrical inner wall defining a compartment and symmetrical about an axis;

a support received in the compartment and comprising a support surface spaced apart from the cylindrical inner wall; and

a microelectronic assembly formed of a flexible substrate having a major surface and a plurality of microelectronic components attached to the surface, said microelectronic assembly being attached to the support surface such that the major surface faces the cylindrical inner wall and is spaced apart therefrom.

13. A microelectronic package according to claim 12 wherein the support comprises a plurality of spacers radially extending above the support

surface and engaging the cylindrical inner wall to provide spacing between the microelectronic assembly and the cylinder inner wall.

14. A microelectronic package according to claim 12 wherein the support defines a central chamber.

15. A microelectronic package according to claim 12 wherein the microelectronic assembly is spaced from the cylindrical inner wall to define a peripheral gas passage for conveying coolant gas.